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EXAMINER	
GUILL, RUSSELL L	

ART UNIT	PAPER NUMBER
2123	

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/020,601	WHITNEY, KRISTOPHER CRAIG	
	Examiner	Art Unit	
	Russell L. Guill	2123	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *21 February 2006*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,2,4-18 and 20-24* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☐ Claim(s) *1-2,4-18,20-24* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *14 December 2001* is/are: a)☐ accepted or b)☒ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

1. This Office Action is in response to an Amendment filed February 21, 2006. Claims 3 and 19 have been cancelled. No claims were added. Claims 1 – 2, 4 – 18 and 20 – 24 are pending. Claims 1 – 2, 4 – 18 and 20 – 24 have been examined. Claims 1 – 2, 4 – 18 and 20 – 24 have been rejected.

Response to Remarks

2. Regarding **claim 19** rejected under 35 USC § 112:

2.1. The Applicant canceled the claim. Accordingly, the rejection is withdrawn.

3. Regarding independent **claims 1, 14, 15 and 23** rejected under 35 USC § 103:

3.1. The Applicant's amendments to the claims overcome the rejections, however, upon further search and consideration, new rejections have been made, necessitated by amendment.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. The following reference provides knowledge of the ordinary artisan at the time of invention:

5.1. Don Anderson, "PCMCIA system architecture: 16-bit cards", 1995, Addison-Wesley Publishing Company; teaches downloading program code from a plug-in module to a handheld computer for execution.

6. Claims 1 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mills (U.S. Patent Number 6,353,870), in view of Kauffman (U.S. Patent Number 6,633,916), further in view of MochaPocketTN5250 (Document provided by applicant on the Information Disclosure Statement, item B.S).

6.1. The art of Kauffman is directed toward a method and apparatus for virtual resource handling in a multi-processor computer (***Title***), including providing a console (***column 7, lines 45 – 60***).

6.2. The art of MochaPocketTN5250 is directed to software to emulate a 5250 terminal on a handheld computer (***paragraph labeled "Application Description:"; and section labeled "Reviews"***).

6.3. The art of Mills is directed to a plug-in expansion card for a handheld computer that incorporates both a memory expansion card and an IO connector (***Abstract, and figure 7***).

6.4. Mills appears to teach:

6.4.1. Connecting a handheld computer to an adapter via a plug-in module coupled to the handheld computer and connected to the adapter via a cable (***figure 7; figure 8; and column 3, lines 55 – 67; and column 7, lines 30 – 35; since figure 7 shows a***

cable connected to the plug-in module (element 140), and figure 8 shows the same cable connected to a "Personal Computer, or other Local Host", it would have been obvious that the handheld computer was connected to an adapter via a plug-in module coupled to the handheld computer and connected to the adapter via a cable).

6.4.2. using program code resident in the plug-in module, wherein configuring the handheld computer includes downloading the program code from the plug-in module to the handheld computer (***figure 7; figure 8; and column 3, lines 37 – 46; and column 3, lines 55 – 67; and column 7, lines 30 – 35; it would have been obvious to the ordinary artisan that program code resident in the plug-in module was downloaded from the plug-in module to the handheld computer***).

6.5. Mills does not specifically teach ***connecting a handheld computer to an adapter on a logically-partitioned computer***.

6.6. Mills does not specifically teach ***configuring the handheld computer to emulate a console for a logical partition in the logically-partitioned computer*** using program code resident in the plug-in module, wherein configuring the handheld computer ***to emulate the console*** includes downloading the program code from the plug-in module to the handheld computer.

6.7. Kauffman appears to teach connecting a personal computer to an adapter on a logically-partitioned computer connected to the adapter via a cable (***figure 2; and column 7, lines 45 – 60***).

6.8. MochaPocketTN5250 appears to teach configuring a handheld computer to emulate a console using program code (***paragraph labeled "Application Description:"; and section labeled "Reviews"***).

6.9. The motivation to use the art of Kauffman with the art of Mills is the statement in Kauffman that a personal computer can be used as the console (***column 7, lines 55 – 60***), which provides the benefit of a versatile multi-purpose device compared to a fixed terminal. Kauffman also recites the benefit of providing a computer system design which provides improved flexibility, resource availability and scalability (***column 4, lines 24 – 26; and column 5, lines 40 - 50***).

6.10. The motivation to use the art of MochaPocketTN5250 with the art of Mills is the statement in Kauffman that a personal computer can be used as the console (***column 7, lines 55 – 60***). Additionally, Mills cites the benefits of providing both I/O and memory functions in a single closed-case removable expansion card, which increases the expansion functional density for portable computer hosts, such as PDAs (***column 3, lines 60 – 67***). That is, the invention increases the amount of functionality that can be accommodated within a given volume allocation for expansion devices (***column 3, lines 60 – 67***). It also provides a viable alternative to 2-slot implementations (***column 3, lines 60 – 67***). Additionally, the invention provides the benefit that it enable a general-purpose portable host to perform application-specific functions requiring dedicated ROM (**column 7, lines 25 – 30**). Also, the use of removable memory devices may provide the best solution to rapidly reconfiguring an application-specific expansion card to initiate a large program or use large data sets (***column 7, lines 54 – 63***). The use of labeled, color-coded, or otherwise distinctive, removable memory devices also may provide the best solution for ease of use for users needing to select a particular program or data set from many for reconfiguring an application specific expansion card (***column 7, lines 54 – 63***).

6.11. Therefore, as discussed above, it would have been obvious to the ordinary artisan at the time of invention to use the art of Kauffman and MochaPocketTN5250 with the art of Mills to produce the claimed inventions.

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7. **Claim 2** is rejected under 35 U.S.C. 103(a) as being unpatentable over Mills (U.S. Patent Number 6,353,870), in view of Kauffman (U.S. Patent Number 6,633,916), further in view of MochaPocketTN5250 (Document provided by applicant on the Information Disclosure Statement, item B.S), further in view of Armstrong (U.S. Patent 6,279,046).

7.1. The art of Armstrong is directed to an event driven interface for a logically-partitioned computer (***Title***).

7.2. Mills does not specifically teach a logically-partitioned AS/400-compatible midrange computer, and an adapter that comprises a workstation adapter allocated to the at least one logical partition.

7.3. Kauffman appears to teach an adapter that comprises a workstation adapter allocated to the at least one logical partition (***figure 2, and column 7, lines 45 – 60***).

7.4. Armstrong appears to teach a logically-partitioned AS/400-compatible midrange computer (***figure 1, and column 3, lines 32 – 48***).

7.5. The motivation to use the art of Armstrong with the art of Mills and Kauffman and MochaPocketTN5250 is the statement in Armstrong that a workstation is connected to the computer (***figure 1, element 28; and column 3, lines 49 – 64***), and the graphic in Mills that the handheld is connected to a local host computer (***figure 8***), which provides a portable low-cost alternative to a workstation.

7.6. Therefore, as discussed above, it would have been obvious to the ordinary artisan at the time of invention to use the art of Mills and Kauffman and MochaPocketTN5250 with the art of Armstrong to produce the claimed invention.

8. **Claim 4** is rejected under 35 U.S.C. 103(a) as being unpatentable over Mills (U.S. Patent Number 6,353,870), in view of Kauffman (U.S. Patent Number 6,633,916), further in view of MochaPocketTN5250 (Document provided by applicant on the Information Disclosure Statement, item B.S), further in view of Armstrong (U.S. Patent 6,279,046).

8.1. Claim 4 is a dependent claim of claim 1, and thereby inherits all of the rejected limitations of claim 1.

8.2. The art of Armstrong is directed to an event driven interface for a logically-partitioned computer (***Title***).

8.3. Mills does not specifically teach that the handheld computer emulates a 5250-compatible console that communicates with an AS/400-compatible midrange computer.

8.4. Armstrong appears to teach an AS/400-compatible midrange computer (***figure 1, and column 3, lines 32 – 48***).

8.5. MochaPocketTN5250 appears to teach configuring a handheld computer to emulate a 5250-compatible console (***paragraph labeled "Application Description:"; and section labeled "Reviews"***).

8.6. The motivation to use the art of Armstrong with the art of Mills and Kauffman and MochaPocketTN5250 is the statement in Armstrong that a workstation is connected to the computer (***figure 1, element 28; and column 3, lines 49 – 64***), and the graphic in Mills that the handheld is connected to a local host computer (***figure 8***), which provides a portable low-cost alternative to a workstation.

9. **Claim 5** is rejected under 35 U.S.C. 103(a) as being unpatentable over Mills (U.S. Patent Number 6,353,870), in view of Kauffman (U.S. Patent Number 6,633,916), further in view of MochaPocketTN5250 (Document provided by applicant on the Information Disclosure Statement, item B.S), further in view of Powderly (U.S. Patent Number 6,732,067).

9.1. The art of Powderly is directed toward a system and adapter card for remote console emulation (***Title***).

9.2. Mills appears to teach a handheld computer with a network interface on a plug-in module (***figure 8, and column 5, lines 60 – 65***).

9.3. Mills does not specifically teach that connecting a handheld computer ***to an adapter comprises attaching the cable to the adapter and to a network interface on the plug-in module***.

9.4. Powderly appears to teach that connecting a console to an adapter comprises attaching the cable to the adapter and to a network interface on a console (***Abstract, and column 1, lines 29 – 35***).

9.4.1. Regarding (***Abstract, and column 1, lines 29 – 35***); it would have been obvious that a network consists of a cable connected between the adapter and the console.

9.5. The motivation to use the art of Powderly with the art of Mills and Kauffman and MochaPocketTN5250 is the benefit recited in Powderly that the invention overcomes a disadvantage of prior art remote consoles by operating equally well in both text and graphics mode (***column 1, lines 52 – 60***).

9.6. Therefore, as discussed above, it would have been obvious to the ordinary artisan at the time of invention to use the art of Mills and Kauffman and MochaPocketTN5250 with the art of Powderly to produce the claimed invention.

10. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Mills (U.S. Patent Number 6,353,870), in view of Kauffman (U.S. Patent Number 6,633,916), further in view of MochaPocketTN5250 (Document provided by applicant on the Information Disclosure Statement, item B.S), further in view of Powderly (U.S. Patent Number 6,732,067), further in view of Comp (U.S. Patent Number 5,875,350).

10.1. The art of Comp is directed to compressed message exchange initiated by basic command accompanied by enhancement code (***Title***).

10.2. Mills does not specifically teach that a network interface comprises a Twinax-compatible interface suitable for communicating with an AS/400-compatible midrange computer.

10.3. Comp appears to teach that a network interface comprises a Twinax-compatible interface suitable for communicating with an AS/400-compatible midrange computer (***figure 6; and column 4, lines 55 – 68; and column 5, lines 1 – 25***)

10.4. The motivation to use the art of Comp with the art of Mills and Kauffman and MochaPocketTN5250 and Powderly is the ability to increase the communications speeds with minimal upgrading of components (***Comp, column 2, lines 15 – 24***).

10.5. Therefore, as discussed above, it would have been obvious to the ordinary artisan at the time of invention to use the art of Mills and Kauffman and MochaPocketTN5250 and Powderly with the art of Comp to produce the claimed invention.

11. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Mills (U.S. Patent Number 6,353,870), in view of Kauffman (U.S. Patent Number 6,633,916), further in view of MochaPocketTN5250 (Document provided by applicant on the Information Disclosure Statement, item B.S), further in view of common knowledge in the art.

11.1. Mills does not specifically teach authenticating with a logical partition via an emulated console.

11.2. Official Notice is taken that it was old and well known to the ordinary artisan at the time of invention to authenticate by a userid and password in order to gain access to a computer. The motivation is to prevent damage to a computer system by unauthorized people.

12. Claims 8 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mills (U.S. Patent Number 6,353,870), in view of Kauffman (U.S. Patent Number 6,633,916), further in view of MochaPocketTN5250 (Document provided by applicant on the Information Disclosure Statement, item B.S).

12.1. Claim 8 is a dependent claim of claim 1, and thereby inherits all of the rejected limitations of claim 1.

12.2. Claim 9 is a dependent claim of claim 8, and thereby inherits all of the rejected limitations of claim 8.

12.3. Regarding claim 8, Mills does not specifically teach performing a system administration operation on the logical partition via the emulated console.

12.4. Regarding claim 9, Mills does not specifically teach performing a second system administrative operation on a second logical partition in the logically-partitioned computer.

12.5. Regarding claim 8, Kauffman appears to teach performing a system administration operation on the logical partition via the emulated console (***column 7, lines 3 – 16***).

12.5.1. Regarding (***column 7, lines 3 – 16***); it would have been obvious that the system administration is performed by the emulated console.

12.6. Regarding claim 9, Kauffman appears to teach performing a second system administrative operation on a second logical partition in the logically-partitioned computer (***column 9, lines 4 – 11***).

13. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Mills (U.S. Patent Number 6,353,870), in view of Kauffman (U.S. Patent Number 6,633,916), further in view of MochaPocketTN5250 (Document provided by applicant on the Information Disclosure Statement, item B.S), further in view of common knowledge in the art.

13.1. Claim 10 is a dependent claim of claim 9, and thereby inherits all of the rejected limitations of claim 9.

13.2. Mills does not specifically teach the method of claim 9 wherein the first adapter is allocated to the first logical partition, and the logically-partitioned computer includes a second adapter allocated to the second logical partition, and further comprising, after performing the first system administration operation, disconnecting the cable from the first adapter and connecting the cable to the second adapter, wherein performing a second system administration operation is performed via the handheld computer and plug-in module interacting with the second logical partition through the second adapter.

13.3. Kauffman appears to teach that the first adapter is allocated to the first logical partition, and the logically-partitioned computer includes a second adapter allocated to the second logical partition (***figure 2***).

13.4. Official Notice is taken that was old and well known to the ordinary artisan at the time of invention to disconnect a cable from one port and connect the cable to a second port. The motivation is to obtain the benefit of reduced cost by needing only a single console for the multiple logical partitions.

13.5. Therefore, as discussed above, it would have been obvious to the ordinary artisan at the time of invention to use common knowledge in the art with the art of Mills and Kauffman and MochaPocketTN5250 and to produce the claimed invention.

14. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Mills (U.S. Patent Number 6,353,870), in view of Kauffman (U.S. Patent Number 6,633,916), further in view of MochaPocketTN5250 (Document provided by applicant on the Information Disclosure Statement, item B.S), further in view of Laity (U.S. Patent Publication Number 2001/0000161).

14.1. Claim 11 is a dependent claim of claim 9, and thereby inherits all of the rejected limitations of claim 9.

14.2. The art of Laity is directed to a PCMCIA card with integrated receptacles for receiving standard communications plugs (***Title***).

14.3. Mills does not specifically teach the method of claim 9, wherein the first adapter is allocated to the first logical partition, wherein the logically-partitioned computer includes a second adapter allocated to the second logical partition, wherein the plug-in module

includes a first and second network interfaces, wherein the first cable is coupled to the first network interface, the method further comprising, prior to performing the second system administration operation, connecting a second cable between the second adapter and the second network interface, wherein performing the second system administration operation is performed via the handheld computer and plug-in module interacting with the second logical partition through the second adapter, and while the first cable is coupled between the first adapter and first network interface.

14.4. Kauffman appears to teach that the first adapter is allocated to the first logical partition, wherein the logically-partitioned computer includes a second adapter allocated to the second logical partition (***figure 2***).

14.5. Laity appears to teach a plug-in module that includes a first and second network interfaces, wherein the first cable is coupled to the first network interface, and, prior to performing the second system administration operation, connecting a second cable between the second adapter and the second network interface, wherein performing the second system administration operation is performed via the handheld computer and plug-in module interacting with the second logical partition through the second adapter, and while the first cable is coupled between the first adapter and first network interface (***figure 1; and paragraph [0003], especially the sentence that starts with, "Presently, Type II cards are used . . . "***).

14.5.1. Regarding (***figure 1; and paragraph [0003], especially the sentence that starts with, "Presently, Type II cards are used . . . "***); it would have been obvious that prior to performing the second system administration operation, a second cable must be connected between the second adapter and the second network interface. It also would have been obvious to have the first cable coupled between the first adapter and first network interface while performing the second system administration

operation. Also, since the prior parent claims use the handheld computer performing as a console, it would have been obvious that the second system administration operation is performed via the handheld computer and plug-in module interacting with the second logical partition through the second adapter.

14.6. The motivation to use the art of Laity with the art of Mills is the knowledge of the ordinary artisan that it is a benefit to not need to swap cables when performing system administration on two logical partitions. Additionally, it allows two sessions to be carried on simultaneously on the emulated console.

15. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Mills (U.S. Patent Number 6,353,870), in view of Kauffman (U.S. Patent Number 6,633,916), further in view of MochaPocketTN5250 (Document provided by applicant on the Information Disclosure Statement, item B.S).

15.1. Claim 12 is a dependent claim of claim 9, and thereby inherits all of the rejected limitations of claim 9.

15.2. Mills does not specifically teach the method of claim 9, wherein the first adapter is allocated to the first logical partition, wherein the logically-partitioned computer includes a second adapter allocated to the second logical partition, the method further comprising:

15.2.1. Connecting a second handheld computer to the second adapter via a second plug-in module coupled to the second handheld computer; and

15.2.2. Configuring the second handheld computer to emulate a second console for the second logical partition in the logically-partitioned computer using program code resident in the second plug-in module.

15.3. Kauffman appears to teach that a first adapter is allocated to the first logical partition, wherein the logically-partitioned computer includes a second adapter allocated to the second logical partition (***figure 2***).

15.4. Kauffman appears to teach connecting a second handheld computer to the second adapter via a second plug-in module coupled to the second handheld computer (***column 7, lines 55 – 57***).

15.4.1. Regarding (***column 7, lines 55 – 57***); since the parent claim 9 used a handheld computer with a plug-in module, it would have been obvious to use a second handheld computer connecting to a second adapter via a second plug-in module coupled to the second handheld computer.

15.5. Kauffman appears to teach configuring the second handheld computer to emulate a second console for the second logical partition in the logically-partitioned computer using program code resident in the second plug-in module (***column 7, lines 55 – 57***).

15.5.1. Regarding (***column 7, lines 55 – 57***); since the parent claim 9 used a handheld computer to emulate a console for logical partition in the logically-partitioned computer using program code resident in the second plug-in module, it would have been obvious to configure a second handheld computer to emulate a second console for the second logical partition in the logically-partitioned computer using program code resident in the second plug-in module.

16. Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Mills (U.S. Patent Number 6,353,870), in view of Kauffman (U.S. Patent Number 6,633,916), further in view of

MochaPocketTN5250 (Document provided by applicant on the Information Disclosure Statement, item B.S), further in view of common knowledge in the art.

16.1. Mills does not specifically teach performing the first and second system administration operations while a user is concurrently authenticated to the first and second logical partitions.

16.2. Official Notice is taken that it was common knowledge in the art at the time of invention to simultaneously authenticate a user with two separate logon sessions on a single computer using a single terminal. The motivation would have been the benefit of allowing easy coordination of related actions being implemented through the two logon sessions.

16.3. Therefore, as discussed above, it would have been obvious to the ordinary artisan at the time of invention to use common knowledge in the art with the art of Mills and Kauffman and MochaPocketTN5250 and to produce the claimed invention.

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17. Independent Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Mills (U.S. Patent Number 6,353,870), in view of MochaPocketTN5250 (Document provided by applicant on the Information Disclosure Statement, item B.S), further in view of Anderson (Don Anderson, "PCMCIA system architecture: 16-bit cards", 1995, Addison-Wesley Publishing Company).

17.1. The art of Mills is directed to a plug-in expansion card for a handheld computer that incorporates both a memory expansion card and an IO connector (***Abstract, and figure 7***).

17.2. The art of MochaPocketTN5250 is directed to software to emulate a 5250 terminal on a handheld computer (***paragraph labeled "Application Description:"; and section labeled "Reviews"***).

17.3. Mills appears to teach a plug-in module for a handheld computer comprising:

17.3.1. a network interface configured to receive a network connector (***Column 5, lines 61 – 62; and figure 8, element labeled "Internet, or other network"***), and

17.3.2. a memory (***figure 7***), and

17.3.3. program code resident in the memory (***column 7, lines 30 – 32***).

17.3.4. a handheld computer that communicates with a multi-user computer over the network interface (***figure 8, PDA and element labeled "Internet, or other network"; the ordinary artisan would have known that the Internet connects to multi-user computers, i.e. servers***).

17.4. Mills does not specifically teach program code resident in the memory ***and configured to be downloaded from the memory to a handheld computer to control*** the handheld computer ***to emulate a console*** that communicates with a multi-user computer over the network interface.

17.5. MochaPocketTN5250 appears to teach configuring a handheld computer to emulate a console using program code (***paragraph labeled "Application Description:"; and section labeled "Reviews"***).

17.6. Anderson appears to teach program code resident in the memory and configured to be downloaded from the memory to a handheld computer to control the handheld computer (***page 48, section labeled, "The Memory Interface", first two sentences; and page 22,***

the paragraph that starts with, "The PCMCIA software architecture consists primarily . . .", starting at the sentence that recites, "once a PC memory card is inserted into a socket , the user can read files or write files just as if a floppy disk had been inserted into a floppy drive"; and page 204, paragraph that starts, "To load the operating system . . ."; and page 315, section labeled, "The XIP Goals").

17.7. The motivation to use the art of MochaPocketTN5250 with the art of Mills would have been the benefits recited in Mills of providing both I/O and memory functions in a single closed-case removable expansion card, which increases the expansion functional density for portable computer hosts, such as PDAs. That is, it increases the amount of functionality that can be accommodated within a given volume allocation for expansion devices. It also provides a viable alternative to 2-slot implementations (**column 3, lines 55 – 67; and column 4, lines 1 – 2**). Also, the use of removable memory devices may provide the best solution to rapidly reconfiguring an application-specific expansion card to initiate a large program or use large data sets. The use of labeled, color-coded, or otherwise distinctive, removable memory devices also may provide the best solution for ease of use for users needing to select a particular program or data set from many for reconfiguring an application specific expansion card (**column 7, lines 54 – 63**). An additional benefit is that the invention of Mills enables general-purpose portable hosts to perform application specific functions requiring dedicated ROM (**column 7, lines 25 – 30**).

17.8. The motivation to use the art of Anderson with the art of Mills would have been the benefit recited in Anderson that accessing files on the memory card is lightning speed compared with the speed of the same operations performed by a floppy drive (***page 22, the paragraph that starts with, "The PCMCIA software architecture consists primarily . . ."***).

17.9. Therefore, as discussed above, it would have been obvious to the ordinary artisan at the time of invention to use the art of MochaPocketTN5250 and Anderson with the art of Mills to produce the claimed invention.

18. Claims 16 - 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mills in view of MochaPocketTN5250, further in view of Anderson as applied to **claim 15** above, further in view of Comp (U.S. Patent Number 5,875,350).

18.1. Mills as modified by MochaPocketTN5250 and Anderson teach the plug-in module for a handheld computer as recited in **claim 15** above.

18.2. The art of Comp is directed to compressed message exchange initiated by basic command accompanied by enhancement code (***Title***).

18.3. Regarding **claim 16**:

18.3.1. Mills does not specifically teach that a network interface comprises a twinaxial interface, and the network connector comprises a twinaxial connector.

18.3.2. Comp appears to teach that a network interface comprises a twinaxial interface, and the network connector comprises a twinaxial connector (***figure 6; and column 4, lines 55 – 68; and column 5, lines 1 – 25***)

18.3.3. The motivation to use the art of Comp with the art of Mills and MochaPocketTN5250 and Anderson is the ability to increase the communications speeds with minimal upgrading of components (***Comp, column 2, lines 15 – 24***).

18.3.4. Therefore, as discussed above, it would have been obvious to the ordinary artisan at the time of invention to use the art of Comp with the art of Mills, MochaPocketTN5250 and Anderson to produce the claimed invention.

18.4. Regarding **claim 17**:

18.4.1. Mills does not specifically teach that a network interface comprises a Twinax-compatible interface suitable for communicating with an AS/400-compatible midrange computer, and the network connector comprises a Twinax-compatible connector.

18.4.2. Comp appears to teach that a network interface comprises a Twinax-compatible interface suitable for communicating with an AS/400-compatible midrange computer, and the network connector comprises a Twinax-compatible connector (***figure 6; and column 4, lines 55 – 68; and column 5, lines 1 – 25***).

18.5. Regarding **claim 18**:

18.5.1. Mills does not specifically teach that the program code is configured to control the handheld computer to emulate a 5250-compatible console that communicates with an AS/400-compatible midrange computer.

18.5.2. Comp appears to teach a 5250-compatible console that communicates with an AS/400-compatible midrange computer (***figure 6; and column 4, lines 55 – 68; and column 5, lines 1 – 25***).

18.5.3. MochaPocketTN5250 appears to teach configuring a handheld computer to emulate a 5250-compatible console (***paragraph labeled "Application Description:"; and section labeled "Reviews"***).

19. Claim 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over Mills in view of MochaPocketTN5250, further in view of Anderson as applied to **claim 15** above, further in view of Kauffman (U.S. Patent Number 6,633,916).

19.1. Mills as modified by MochaPocketTN5250 and Anderson teach the plug-in module for a handheld computer as recited in **claim 15** above.

19.2. Regarding **claim 20**:

19.2.1. The art of Kauffman is directed toward a method and apparatus for virtual resource handling in a multi-processor computer (***Title***), including providing a console (***column 7, lines 45 – 60***).

19.2.2. Mills does not specifically teach the module of claim 15, wherein the program code is configured to emulate a console that communicates with a logical partition in a logically-partitioned multi-user computer.

19.2.3. Kauffman appears to teach that the program code is configured to emulate a console that communicates with a logical partition in a logically-partitioned multi-user computer (***figure 2; and column 7, lines 45 – 60; and column 1, lines 15 – 32***).

19.2.4. The motivation to use the art of Kauffman with the art of Mills and MochaPocketTN5250 and Anderson is the statement in Kauffman that a personal computer can be used as the console (***column 7, lines 55 – 60***), which provides the benefit of a versatile multi-purpose device compared to a fixed terminal.

19.2.5. Therefore, as discussed above, it would have been obvious to the ordinary artisan at the time of invention to use the art of Kauffman with the art of Mills, MochaPocketTN5250 and Anderson to produce the claimed invention.

20. Claim 21 is rejected under 35 U.S.C. 103(a) as being unpatentable over in view of MochaPocketTN5250, further in view of Anderson as applied to **claim 15** above, further in view of Laity (U.S. Patent Publication Number 2001/0000161).

20.1. Mills as modified by MochaPocketTN5250 and Anderson teach the plug-in module for a handheld computer as recited in **claim 15** above.

20.2. Regarding **claim 21**:

20.2.1. The art of Laity is directed to a PCMCIA card with integrated receptacles for receiving standard communications plugs (***Title***).

20.2.2. Mills does not specifically teach a second network interface configured to receive a second network connector.

20.2.3. Laity appears to teach a second network interface configured to receive a second network connector (***figure 1; and paragraph [0003], especially starting at the sentence that starts with, "Presently, Type II cards are used . . . "***).

20.2.4. The motivation to use the art of Laity with the art of Mills and MochaPocketTN5250 and Anderson would have been the knowledge of the ordinary artisan of the benefits of not needing to swap cables when performing system administration on two logical partitions, and it allows two sessions to be carried on simultaneously on the emulated console.

20.2.5. Therefore, as discussed above, it would have been obvious to the ordinary artisan at the time of invention to use the art of Laity with the art of Mills, MochaPocketTN5250 and Anderson to produce the claimed invention.

21. Claim 22 is rejected under 35 U.S.C. 103(a) as being unpatentable over Mills, in view of MochaPocketTN5250, further in view of Anderson, further in view of Laity as applied to **claim 21** above, further in view of common knowledge in the art.

21.1. Mills as modified by MochaPocketTN5250 and Anderson and Laity teach the plug-in module for a handheld computer with a second network interface as recited in **claim 21** above.

21.2. Regarding **claim 22**:

21.3. Mills does not specifically teach that the program code is configured to control the handheld computer to emulate first and second consoles that respectively communicate with first and second logical partitions in a logically-partitioned multi-user computer over the first and second network interfaces.

21.4. Official Notice is taken that it was common knowledge in the art at the time of invention to simultaneously authenticate a user with two separate logon sessions on a single computer using a single terminal. For example, using Microsoft Windows operating system, multiple sessions of the telnet program can be run to logon to a single remote computer. The motivation would have been the benefit of allowing easy coordination of related actions being implemented through the two logon sessions.

22. Independent Claim 23 is rejected under 35 U.S.C. 103(a) as being unpatentable over Mills (U.S. Patent Number 6,353,870), in view of MochaPocketTN5250 (Document provided by applicant on the Information Disclosure Statement, item B.S), further in view of Anderson

(Don Anderson, "PCMCIA system architecture: 16-bit cards", 1995, Addison-Wesley Publishing Company).

22.1. The art of Mills is directed to a plug-in expansion card for a handheld computer that incorporates both a memory expansion card and an IO connector (***Abstract, and figure 7***).

22.2. The art of MochaPocketTN5250 is directed to software to emulate a 5250 terminal on a handheld computer (***paragraph labeled "Application Description:"; and section labeled "Reviews"***).

22.3. Mills appears to teach a handheld computer including a module interface (***figure 7, and figure 8***).

22.4. Mills appears to teach a plug-in module coupled to the module interface of the handheld computer (***figure 7, and figure 8***), the plug-in module including a network interface configured to receive a network connector (***figure 8, elements 140 and "Internet, or other network"; and column 5, lines 59 – 67***), a memory (***figure 7, and figure 8***), and program code resident in the memory (***column 7, lines 30 – 32***).

22.5. Mills appears to teach a handheld computer that communicates with a multi-user computer over the network interface (***figure 8, PDA and element labeled "Internet, or other network"; the ordinary artisan would have known that the Internet connects to multi-user computers, i.e. servers***).

22.6. Mills does not specifically teach program code resident in the memory ***and configured to be downloaded from the plug-in module to the handheld computer to control the handheld computer to emulate a console*** that communicates with a multi-user computer over the network interface.

22.7. MochaPocketTN5250 appears to teach configuring a handheld computer to emulate a console using program code (***paragraph labeled "Application Description:"; and section labeled "Reviews"***).

22.8. Anderson appears to teach program code resident in the memory and configured to be downloaded from the plug-in module to a handheld computer to control the handheld computer (***page 48, section labeled, "The Memory Interface", first two sentences; and page 22, the paragraph that starts with, "The PCMCIA software architecture consists primarily . . .", starting at the sentence that recites, "once a PC memory card is inserted into a socket , the user can read files or write files just as if a floppy disk had been inserted into a floppy drive"; and page 204, paragraph that starts, "To load the operating system . . ."; and page 315, section labeled, "The XIP Goals"***).

22.9. The motivation to use the art of MochaPocketTN5250 with the art of Mills would have been the benefits recited in Mills of providing both I/O and memory functions in a single closed-case removable expansion card, which increases the expansion functional density for portable computer hosts, such as PDAs. That is, it increases the amount of functionality that can be accommodated within a given volume allocation for expansion devices. It also provides a viable alternative to 2-slot implementations (**column 3, lines 55 – 67; and column 4, lines 1 – 2**). Also, the use of removable memory devices may provide the best solution to rapidly reconfiguring an application-specific expansion card to initiate a large program or use large data sets. The use of labeled, color-coded, or otherwise distinctive, removable memory devices also may provide the best solution for ease of use for users needing to select a particular program or data set from many for reconfiguring an application specific expansion card (**column 7, lines 54 – 63**). An additional benefit is that

the invention of Mills enables general-purpose portable hosts to perform application specific functions requiring dedicated ROM (**column 7, lines 25 – 30**).

22.10. The motivation to use the art of Anderson with the art of Mills would have been the benefit recited in Anderson that accessing files on the memory card is lightning speed compared with the speed of the same operations performed by a floppy drive (***page 22, the paragraph that starts with, "The PCMCIA software architecture consists primarily . . ."***).

22.11. Therefore, as discussed above, it would have been obvious to the ordinary artisan at the time of invention to use the art of MochaPocketTN5250 and Anderson with the art of Mills to produce the claimed invention.

23. Examiner's Note: Examiner has cited particular columns and line numbers in the references applied to the claims above for the convenience of the applicant. Although the specified citations are representative of the teachings of the art and are applied to specific limitations within the individual claim, other passages and figures may apply as well. It is respectfully requested from the applicant in preparing responses, to fully consider the references in their entirety as potentially teaching all or part of the claimed invention, as well as the context of the passage as taught by the prior art or disclosed by the Examiner.

Conclusion

24. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

25. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Russell L. Guill whose telephone number is 571-272-7955. The examiner can normally be reached on Monday – Friday 10:00 AM – 6:30 PM.

26. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paul Rodriguez can be reached on 571-272-3753. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300. Any inquiry of a general nature or relating to the status of this application should be directed to the TC2100 Group Receptionist: 571-272-2100.

27. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Russ Guill
Examiner
Art Unit 2123

RG

Paul L. Rodriguez
Primary Examiner
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4/25/06